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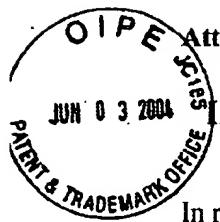
## \*BIBDATASHEET\*

Bib Data Sheet

CONFIRMATION NO. 7035

SERIAL NUMBER 09/974,759	FILING OR 371(c) DATE 10/09/2001 RULE	CLASS 345	GROUP ART UNIT 2675	ATTORNEY DOCKET NO. IMM142
<b>APPLICANTS</b> Stephen D. Rank, San Jose, CA;				
<b>** CONTINUING DATA *****</b>				
<b>** FOREIGN APPLICATIONS *****</b>				
<b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED</b> ** 11/29/2001				
Foreign Priority claimed 35 USC 119 (a-d) conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance	STATE OR COUNTRY CA	SHEETS DRAWING 5	TOTAL CLAIMS 28
Verified and Acknowledged Examiner's Signature	Initials	INDEPENDENT CLAIMS 4		
<b>ADDRESS</b> 022903				
<b>TITLE</b> HAPTIC FEEDBACK SENSATIONS BASED ON AUDIO OUTPUT FROM COMPUTER DEVICES				
FILING FEE RECEIVED 1356	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		

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Attorney Docket No. IMMR-003/00US

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of **Stephen D. RANK**

Serial No.: 09/974,759

Examiner: Paul A. Bell

Confirmation No.: 7035

Art Unit: 2675

Filed: October 9, 2001

For: **HAPTIC FEEDBACK SENSATIONS BASED ON AUDIO OUTPUT FROM COMPUTER DEVICES**

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**INFORMATION DISCLOSURE STATEMENT  
 UNDER 37 C.F.R. §1.97(b)**

In accordance with the duty of disclosure set forth in 37 C.F.R. §1.56,  
 Applicant(s) hereby submits the following information in conformance with 37 C.F.R.  
 §§1.97 and 1.98.

- Pursuant to 37 C.F.R. §1.98, a copy of each document cited in the attached Form PTO/SB/08 is included in electronic format on the enclosed CD-Rom.
- No copies of the publications listed on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in prior Application Serial No. \_\_ to which the above-identified application claims priority under 35 U.S.C. §120.
- No copies of any U.S. patents or U.S. patent application publications listed on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98 because this application was filed after June 30, 2003.
- Publication(s) \_\_ listed on the attached Form PTO/SB/08A were cited in a foreign search or examination report corresponding to \_\_ application serial no. \_\_ and mailed on \_\_.

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- Enclosed is a copy of a non-English publication(s) \_\_\_. Pursuant to §609 of the M.P.E.P., Applicant submits the attached foreign search or examination report, which cites such non-English language publication(s).
- Enclosed is a copy of a non-English publication(s) \_\_\_. English language publication \_\_ (copy enclosed) claims priority from this non-English publication.
- Enclosed is an explanation of non-English publication(s) \_\_ for which an English translation is not available.
- Enclosed is an English translation of non-English publication(s) \_\_ cited in the attached Form PTO/SB/08A.
- Enclosed is a copy of pending patent Application Serial No. \_\_\_\_.

This Information Disclosure Statement is filed within any one of the following time periods:

- within three months from the filing date of this national application other than a CPA under 37 C.F.R. § 1.53(d);
- within three months from the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in this international application;
- before the mailing date of a first office action on the merits; or
- before the mailing of a first office action after the filing of a request for continued examination under 37 C.F.R. § 1.114.

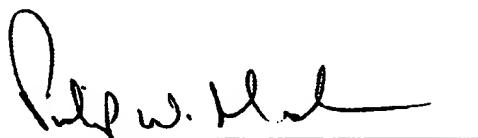
It is respectfully requested that the Examiner consider the above-noted information and return an initialed copy of the attached Form PTO/SB/08A to the undersigned.

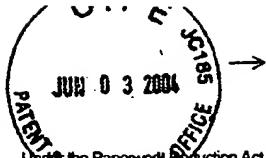
Dated: June 3, 2004

Respectfully submitted,  
**COOLEY GODWARD LLP**

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By:

  
Philip W. Marsh  
Reg. No. 46,061



Substitute for form 1449/07/10

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

3

## Complete If Known

Application Number	09/974,759
Filing Date	October 9, 2001
First Named Inventor	Stephen D. Rank
Art Unit	2675
Examiner Name	Paul A. Bell

Attorney Docket Number

IMMR003/00US

U.S. PATENT DOCUMENTS				
Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
A1		6,422,941	7/23/2002	Thorner et al.
A2		6,160,489	12/12/2000	Perry et al.
A3		6,111,577	8/29/2000	Ziles et al.
A4		5,690,582	11/25/1997	Ulrich et al.
A5		5,575,761	11/19/1996	Hajianpour
A6		5,437,607	8/1/1995	Taylor
A7		5,436,622	7/25/1995	Gutman et al.
A8		5,283,970	2/8/1994	Aigner
A9		5,186,695	2/16/1993	Mangseth et al.
A10		5,175,459	12/29/1992	Danial et al.
A11		5,165,897	11/24/1992	Johnson
A12		5,022,384	6/11/1991	Freels
A13		4,885,565	12/5/1989	Embach
A14		4,484,191	11/20/1984	Vavra
A15		4,464,117	8/7/1984	Foerst
A16		4,333,070	6/1/1982	Barnes
A17		4,262,549	4/21/1981	Schwellenbach
A18		4,127,752	11/28/1978	Lowthrop
A19		2,972,140	2/14/1961	Hirsch

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Examiner Initials <sup>3</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)			
B1	JP	H2-185278		7/19/1990	Taito Corporation	
B2	JP	H4-8381		1/13/1992	Epoch Co. and Key-Planning Co.	
B3	JP	H7-24147		1/27/1995	Sega Corporation	
B4	JP	H5-192449		8/3/1993	Taito Corporation	
B5						

Examiner Signature	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

09/974,759

Filing Date

October 9, 2001

JUN 08 2004

First Named Inventor

Stephen D. Rank

Art Unit

2675

Examiner Name

Paul A. Bell

Technology Center 2600

Attorney Docket Number

IMMR003/00US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	C1	PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," <i>Master of Science Thesis</i> , MIT, Aug. 1990, archived Nov. 8, 1990.
	C2	CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," <i>Bachelor of Science Thesis</i> , MIT, May 1983, archived June 23, 1983.
	C3	WIKER, "Teletouch Display Development: Phase 1 Report," <i>Technical Report</i> 1230, Naval Ocean Systems Center, San Diego, July 1988.
	C4	BLISS, "Optical-to-Tactile Image Conversion for the Blind," <i>IEEE Transactions on Man-Machine Systems</i> , Vol. MMS-11, No. 1, March 1970.
	C5	JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," <i>Armstrong Aerospace Medical Research Laboratory</i> , AAMRL-TR-80-039, August, 1990.
	C6	KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," <i>PRESENCE</i> , 4(4):387-402, Harvard Univ., 1995.
	C7	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.
	C8	EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," <i>DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1</i> , ASME 1994.
	C9	GOBEL et al., "Tactile Feedback Applied to Computer Mice," <i>International Journal of Human-Computer Interaction</i> , Vol. 7, No. 1, pp. 1-24, 1995.
	C10	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 <sup>nd</sup> Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.
	C111	"Cyberman Technical Specification," <i>Logitech Cyberman SWIFT Supplement to Logitech Mouse Technical Reference and Programming Guide</i> , 4/5/1994.
	C12	OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," <i>Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95</i> , Seoul, Korea, 21-24 August 1995.
	C13	KACZMAREK et al., "Tactile Displays," <i>Virtual Environment Technologies</i> , Chap. 9, pp. 349-414.
	C14	LAKE, "Cyberman from Logitech," at <a href="http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html">http://www.ibiblio.org/GameBytes/issue21/greviews/cyberman.html</a> , 1994.
	C15	"Component Maintenance Manual With Illustrated Parts List, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 28 January 2002 (3 pages).

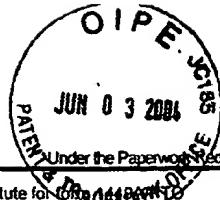
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Substitute for Form 1470, 1470A, 1470B

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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of

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Application Number	09/974,759
Filing Date	October 9, 2001
First Named Inventor	Stephen D. Rank
Art Unit	2675
Examiner Name	Paul A. Bell
Attorney Docket Number	IMMR003/00US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	C16	"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502," Safe Flight Instrument Corporation, Revised 15 July 1980 (23 pages).
	C17	SCANNELL, "Taking a Joystick Ride," <i>Computer Currents</i> , Boston Edition, Vol. 9, No. 11, November 1994
	C18	YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," <i>Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems</i> , Raleigh, NC, July 7-10, 1992
	C19	NOLL, "Man-Machine Tactile," <i>SID Journal</i> , July/August 1972 Issue.
	C20	ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance in Telepresence Tasks," <i>Ph.D. Dissertation</i> , Stanford University, June 1994.

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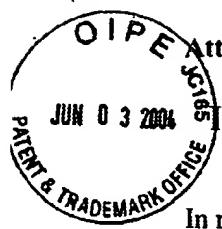
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Attorney Docket No. IMMR-003/00US

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of **Stephen D. RANK**

Serial No.: 09/974,759

Examiner: Paul A. Bell

Confirmation No.: 7035

Art Unit: 2675

Filed: October 9, 2001

For: **HAPTIC FEEDBACK SENSATIONS BASED ON AUDIO OUTPUT FROM COMPUTER DEVICES**

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**INFORMATION DISCLOSURE STATEMENT TRANSMITTAL**

Enclosed is an Information Disclosure Statement and accompanying Form PTO/SB/08A for the above-identified patent application.

- In accordance with 37 C.F.R. §1.97(b), no additional fee for submission of the IDS is required.
- In accordance with 37 C.F.R. §1.97(c), also enclosed is:
  - the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p); or
  - a statement as specified in 37 C.F.R. §1.97(e).
- In accordance with 37 C.F.R. §1.97(d), a statement as specified in 37 C.F.R. § 1.97(e) and the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) are also enclosed.
- Check No. \_\_\_ in the amount of \$\_\_\_ for the total fee is attached.
- A return receipt postcard is also enclosed.
- Please charge \$\_\_\_ to Deposit Account No. 50-1283 for the total fee. This paper is being submitted in duplicate.

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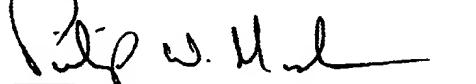
Dated: June 3, 2004

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One Freedom Square  
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Tel: (703) 456-8000  
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By:

Respectfully submitted,

**COOLEY GODWARD LLP**

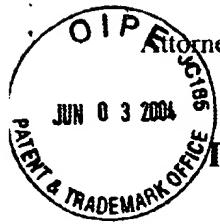


Philip W. Marsh

Reg. No. 46,061

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Attorney Docket No. IMMR-003/00US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of **Stephen D. RANK**

Serial No.: 09/974,759

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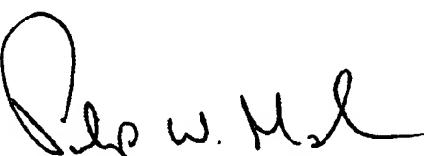
**Customer Number: 022903**

Dated: June 3, 2004

Respectfully submitted,  
**COOLEY GODWARD LLP**

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2675 #  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No.: 09/974,759

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Crystal Plaza Two, Lobby, Room 1B03  
Arlington, VA 22202

**REQUEST FOR CONTINUED EXAMINATION  
UNDER 37 C.F.R. §1.114**

Applicants submit this request for continued examination under 37 C.F.R. §1.114 for the above-identified application.

[x] Please consider the following submission(s) required under 37 C.F.R. §1.114:

The amendment/reply under 37 C.F.R. §1.116 previously filed on \_\_\_\_\_  
 The arguments in the Appeal Brief and/or Reply Brief previously filed on \_\_\_\_\_  
 The enclosed amendment/reply submitted in response to the Official Action dated \_\_\_\_\_  
 Information Disclosure Statement, Transmittal, PTO/SB/08A  
 Petition for Extension of Time  
 Other: CD-Rom containing electronic copies of (43) references.

[x] Also enclosed is:

Return receipt postcard  
 Check in the amount of \$770.00 for the total fee as calculated below.  
 An Assertion of Entitlement to Small Entity Status was submitted previously.  
 Other: Change of Correspondence Address.

The fee for the request for continued examination is calculated below [ ] and in accordance with the enclosed amendment:

06/04/2004 SSESHE1 00000089 09974759

01 FC:1001

770.00 0P

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	NO. OF CLAIMS	CLAIMS PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	FEES
Total Claims	25	- = 28	0	x \$18.00	\$0.00
Independent Claims	7	- = 7	0	x \$86.00	\$0.00
Multiple dependent claims not previously presented, add \$290.00					
Total Amendment Fee					
Continued Examination Fee under 37 C.F.R. §1.17(e) of \$770.00					\$770.00
If small entity status is applicable, subtract 50% of Total Amendment Fee and Continued Examination Fee					
Other fees: (specify)					
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A check for the total fee is attached.

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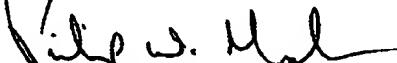
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Dated: June 3, 2004

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